

## A New *Aulocostethus* from Florida (Hymenoptera: Pompilidae)

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Few genera of pompilid wasps are so poorly known as *Aulocostethus* and *Epipompilus*, the two genera which make up the tribe Epipompilini of the subfamily Pompilinae. Bradley, in preparing his revision of this group (1944, Trans. Amer. Ent. Soc., 70: 139-147), was able to find only two specimens of *Aulocostethus* in American museums, and none at all of *Epipompilus*. Males of both genera are entirely unknown, and none of the four species of *Aulocostethus* and of the two of *Epipompilus* is known from more than two specimens. Both genera inhabit Central America and northern South America.

The discovery of another specimen of *Aulocostethus* is an event in itself, and when that specimen represents a striking new species from within the limits of the United States, the event is particularly exciting. In coloration, this new form is very different from any described species, the wings being wholly dark and with a coppery luster, and the body being unspotted but brightly patterned with black and red. Structurally, the species agrees well with the generic diagnosis given by Bradley (op. cit., p. 140). It differs from *astecus* Cresson in that the pronotum is not margined laterally and the posterior claws are not different from the others; it differs from *excelsus* Bradley in the more prominently protruding front and the shorter pronotum. To the generic venational characters cited by Bradley may be added the fact that the anal lobe of the hind wing is only about .3 the length of the submedian cell, and the anal vein is straight, paralleling the preaxillary furrow, the transverse median vein leaving it at an angle.

### *Aulocostethus pulcherrimus* new species

*Type.* ♀, Everglades National Park, Dade Co., FLORIDA, December 30, 1953 (H. V. Weems, Jr.) [U. S. National Museum no. 6270].

*Description.* Length 6.5 mm.; fore wing 5.7 mm. Head and thorax black except as follows: palpi brownish, tips of the labial palpi pale; apical half of mandibles rufo-castaneous; antennae dark brown; legs dark brown (except the coxae black), the inner surface of the front femora with a longitudinal streak of light brown; entire anterior, lateral, and posterior border of pronotum narrowly rufous; scutellum, median portion of metanotum, and entire propodeum, bright rufous. Entire abdomen bright rufous and strongly shining, except the extreme base of the first segment black. Front wings wholly and evenly dark fuliginous, with a coppery luster. Hind wings nearly hyaline basally, the apical fourth clouded.

Clypeus, front, vertex, pronotum, and mesonotum with rather abundant short, blackish hairs; clypeus, front, and temples also with shorter, silvery tomentum; basal six segments of antennae with suberect setulae on the dorsal surface; base of mandibles prominently setose; legs and dark parts of thorax with brownish pubescence which grades into silvery on the front coxae and the mesopleura; propodeum and abdomen with silvery pubescence, the apical abdominal segment also with some long, pale hairs above and below.

Mandibles broad, with a single strong tooth on the inner margin. Labrum barely protruding from the emargination of the clypeus. Clypeus 2.4 times as broad as high, its apical margin arcuately emarginate. Head, exclusive of mouthparts, one and one quarter times as broad as high. Front convex, strongly protruding above the antennal bases, perpendicularly declivous between the sockets. Front dull, with microscopic sculpturing and dense, shallow punctures. Malar space nearly as long as the antennal pedicel. Eyes conspicuously hairy. Middle interocular distance .57 times the transfacial distance; upper interocular distance .8 the lower interocular distance. Ocelli in a broad triangle; postocellar line greater than ocello-ocular line as 7:4. Antennae slender and elongate, the first four segments in a ratio of about 15:6:13:15, segment three about 4 times as long as thick, and equal to .6 the upper interocular distance.

Pronotum much shorter than the mesonotum, its anterior surface rather steeply declivous. Propodeum sloping evenly, without a median impression. Pronotum somewhat shining, the mesonotum somewhat more punctate and less shining, the remainder of the thorax and propodeum with enough microscopic sculpturing and close punctures to render the surface rather dull; propodeum and upper portion of the metapleura with the sculpturing in the form of very fine striations. Front femora moderately incrassate. Middle and hind tibiae with several rows of very short spines above. Tarsi with conspicuous pubescence in which a few weak spines are intermingled. Claws dentate, the tooth stout and erect.

Basal vein of the fore wing arising very slightly beyond the junction of the transverse median vein. Stigma four times as long as wide; marginal cell slightly more than three times as long as wide, removed from the apex of the wing by less than half its length. Third submarginal cell much longer than the second, removed from the outer wing margin by much less than its own length. Second recurrent vein arising on the subdiscoidal vein about two-thirds the distance from its base. Hind wing with the cubitus arising beyond the transverse median vein a distance about equal to the length of the latter vein. The major veins of both wings attain the outer wing margin.

Abdomen short and stout, the integument shining; apical segment broad and slightly depressed.

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## Review

ATLAS OF SCALE INSECTS OF NORTH AMERICA. Vol. VII. The families Acleridae, Asterolecaniidae, Conchaspidae, Dactylopiidae and Laccideridae. By G. F. FERRIS. Pp. 1-233, 94 figs. Stanford University Press, Stanford, California, 1955.

This volume is a continuation of Professor Ferris' well known Atlas, and it follows the same general plan and style as the preceding volumes. Two families are treated more briefly in order not to duplicate material in recent monographs by other authors. The families not yet covered in this series are the Coccidae (= Lecaniidae), Orthozidae, and Margarodidae.—R. G. S.